

Part 5: Invited Addresses

The Lessons of History

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Some years back I was approached by a London publisher to write a brief history of parapsychology, and in the spring of this year the work was completed and now awaits publication. In it I have attempted to trace the evolution of our field from the time of the mesmerists, or even earlier, down to the present. I always knew it would not be an easy task, but the difficulty was not just the practical one of trying to condense an enormous number of facts into a manageable and readable narrative; the real challenge was, rather, how to sustain the reader's interest in a history that could not, alas, be presented as a straightforward success story—which is what one would tend to do if one were writing the history of any of the conventional sciences.

In saying this, however, I do not want to belittle the efforts of the researchers themselves. On the contrary, their dedication to their science in the face of every kind of obstacle and discouragement can only be described as heroic. But, in relation to the three main criteria of success in conventional science—namely, (1) theoretical insights, (2) practical applications, and (3) intellectual prestige—one cannot pretend that parapsychology (or psychical research—I shall use the terms interchangeably) has yet proved itself. So perhaps we should take as our first lesson of history this lesson in humility. The hard truth we have to face is that not even the bare *reality* of psi phenomena has yet been established to general satisfaction.

THE RELEVANCE OF HISTORY

To be fair to ourselves, however, it must be said that it is only in the physical or natural sciences that spectacular progress has become the rule. We have only to think of what has happened in our lifetime in such fields as, say, medical research, microbiology, information technology, particle physics, or cosmology, to name but a few salient examples, to appreciate what such progress can mean. In the case of the human or social sciences, on the other hand, be it economics, sociology, anthropology, or especially, psychology, what we find are not so much revolutionary discoveries or permanent advances as a succession of shifting viewpoints, or schools of thought, coupled with a progressive sophistication in techniques and methodology. For example, the current use of computer analyses in the social sciences has added considerably to their power. Parapsychology compares not unfavorably with these other human or social sciences when it comes to statistical refinement or innovative instrumentation.

That being said, however, the vicissitudes of parapsychology are much more dramatic than anything we find in such other sciences, especially in what concerns the "strong phenomena." In discussing the history of parapsychology, one needs to distinguish between phenomena which, at face value are self-evidently paranormal (i.e., the strong phenomena) and those phenomena whose paranormality can only be gauged by dint of statistical analysis (i.e., the weak phenomena). The latter, though known since the late nineteenth century, do not become important before the "Rhine Revolution" (as I like to call it). So far as the history of the strong phenomena is concerned, what we find is something much more reminiscent of the history of art than the history of science — be it the natural or the social sciences. For, in the history of art — and this is true of literature and music as well as the visual arts — there is no such thing as systematic progress. What you find instead is the brief flowering of some new school or movement, usually centered around certain individuals of genius, followed in due course by inferior, uninspired, and imitative work. Eventually it dissolves or is eclipsed, after which some new school or movement arises elsewhere, dedicated to quite different ideals, until it too, in turn, becomes exhausted and is superseded. The whole process is so familiar to us that examples are scarcely needed. You

have only to consider how hard put one would be to name even one distinguished painter or sculptor in France at the present time!

In like manner, we find in the history of parapsychology, numerous examples of promising new developments, usually centered on some individual or individuals credited with outstanding new powers, which, for a time, make it look as if a new era is, indeed, imminent. But what happens? The phenomena decline, the individuals lose their powers or become discredited, and what started with the highest hopes turns out to be a false dawn. Perhaps the most recent episode to conform to this pattern is the spate of ostensible paranormal metal-bending that followed the advent of Uri Geller in the early 1970s.

Of course, one critical difference between the history of art and the history of parapsychology is that works of art normally remain extant so that one does not have to defer to the historian's judgment. In the case of parapsychology, on the other hand, the phenomena in question are no longer there to be observed so that we are entirely dependent on records and reports. You could say, of course, that this is no different from, say, political history, where we are likewise dealing with bygone events to which only documents or artifacts still bear witness. Paranormal claims are open to suspicion in a way that ordinary historical events are not. Perhaps if the great exponents of the strong phenomena in the past had devoted themselves to producing paranormal artifacts (i.e., permanent paranormal objects) instead of transient materializations or table levitations, we would now be much closer to the position of the art historian—but such was not to be. The point I want to stress, however, is that, like those outbursts of creativity that we associate with the arts, the onset of paranormal phenomena appears to proceed in waves. Why this should be so we shall consider in due course. Meanwhile, I am proposing it as our second lesson of history.

One consequence of these fluctuations is that many strong phenomena, just because they are no longer observable today, tend to be dismissed as spurious even by some who are very knowledgeable about the historical facts. Moreover, not only do the critics of parapsychology, like Ray Hyman or Antony Flew, question the relevance of the historical evidence, but many practicing experimental parapsychologists concur. The position they adopt is that if a given phenomenon cannot now be elicited for experimental

purposes, it would be wiser simply to ignore it. Parapsychology, according to this school of thought, should concern itself exclusively with problems which we can hope to resolve. I for one, however, must dissent. If we aspire to become something more than just technicians, we need to preserve a perspective. To confine one's attention to the here and now is, I submit, a mark of provincialism. I like to think of the study of the paranormal as displaying a vast landscape replete with all kinds of weird and exotic flora and fauna, so to speak, which, even if they are currently inaccessible, are too intriguing to ignore. In short, writing a history of parapsychology has convinced me that history does have lessons, that the past is not irrelevant to current problems and concerns.

THE DECLINE EFFECT

One aspect of the uneven course which our science has taken has been this steady attenuation in the strength of the phenomena which we try to study. Ian Stevenson, in his presidential address to the SPR in 1989, spoke of "The Decline of Major Paranormal Phenomena" (Stevenson, 1990). This can be seen most conspicuously in the case of the paraphysical phenomena. Physical mediumship is now virtually a thing of the past, so that the only examples of macro-PK now available for study today are poltergeist cases (Recurrent Spontaneous PK, to use the technical jargon). Interestingly, such cases constitute an exception to the rule inasmuch as they have changed very little down the centuries and show no signs of disappearing. Unfortunately, they are shortlived episodes and, though certainly worth studying, present formidable practical difficulties for systematic or definitive research.

Be that as it may, if you want to study PK, the approved method is to get your subject to try influencing a binary electronic random event generator. Indeed, so much has this become the recognized mode that some contemporary exponents of the technique have cast doubt on whether macro-PK has ever been convincingly demonstrated. At all events, in this computer age, we are now free to run millions of trials in a brief span of time so that even a quite minute PK effect—and Robert Jahn, for example, at his laboratory in Princeton, is happy with a bonus of even one extra hit per thou-

sand trials with an average subject—could still produce an impressive overall score provided, always, that the direction or scoring remains consistent. Unfortunately, very few subjects are capable of such consistency for long enough to produce scores that are any more significant than those that were forthcoming in the bad old days when we had to resort to the laborious process of tossing dice. Indeed, a recent meta-analysis carried out by Radin and Ferrari (1991) shows that the overall “effect size” of the dice experiments is slightly superior to that of the RNG experiments—though both are extremely marginal.

Over ten years ago Edwin May of the Stanford Research Institute obtained funding to carry out what he conceived to be the methodologically perfect PK experiment, using all the devices that modern technology could provide (May, Humphrey, & Hubbard, 1980). His project continued for about one year. At that point, the overall odds against chance amounted to a modest 50 to 1. This is better than a null result, but the thought of so much effort and expense being harnessed to produce such an exiguous outcome must make one worry as to whether we may one day reach a position when it would become virtually impossible to demonstrate PK at all.

The short-term decline effect was, of course, a familiar feature of the parapsychology laboratory when J.B. Rhine was in his heyday. Indeed, the intrasessional declines provided perhaps the clearest clue in the early PK work that something out of the ordinary was going on. Unfortunately, it soon transpired that a decline effect, for ESP no less than for PK, could persist across sessions and, ultimately, across an entire career. Nearly all the high-scorers eventually lost their ability. Even Pavel Stepanek, whose ten-year career as an ESP subject earned him a mention in the *Guinness Book of Records*, eventually ran out of steam. When, after a long break, he was retested recently by Dr. Kappers in Amsterdam, he could produce only chance scores (Kappers et al., 1990). I do not think it was loss of motivation or boredom in his case, as has sometimes been put forward as an explanation for the long-term decline effect. It was Stepanek's great strength that he was constitutionally incapable of ever being bored! Nor can we take seriously Martin Gardner's attempt to explain how he might have relied throughout on trickery (Gardner, 1989). If he was, indeed, a trickster, he should have steadily improved as he became more

practiced. Whatever the explanation of these long-term declines, it must surely be something deep and pervasive.

TWO FALSE DAWNS

One consequence of these historical vicissitudes is that, more than once, we seem to have stood on the threshold of a new era in which parapsychology would at last come of age and gain universal recognition. Two examples, in particular, impressed themselves upon me while I was writing my history. The first concerns the founding of the SPR in London in 1882; the second, the setting up of the Duke University Laboratory under Rhine. The beginnings of the SPR were modest enough. It was largely thanks to the financial support of the spiritualists, who initially made up much of its membership, that it could get going at all. But very soon it began attracting eminent scholars and scientists, plus many other notabilities of Victorian England (Gladstone, Tennyson, Ruskin, the painter G.F. Watts, and Lewis Carroll are among its earliest members). Within a decade it could boast no less than eight Fellows of the Royal Society on its Council. But far more important than its public relations was its sheer productivity in those pioneering days and the high standard of scholarship it sustained, as the early volumes of its *Proceedings* testify. This was mainly thanks to a few dedicated and indefatigable enthusiasts among whom Myers, Gurney, Hodgson, and Eleanor Sidgwick are perhaps the most outstanding. Their work includes the massive collection of spontaneous cases, the testing of mediums and psychics, laboratory experiments using hypnosis, and much else. Myers, in particular, enjoyed an international reputation and was prominent at the early international congresses of psychology. For, in the late nineteenth century, especially in France, there was considerable interest in the problems of dissociation, as exemplified by the various sub-conscious automatisms. This was a salient feature of Myers's own work with mediums, on the basis of which he built his theory of the subliminal self.

What went wrong? Why did this hopeful initiative fail to sustain its momentum? Why, indeed, has the membership of the Society never increased since those early days? We may get a clue when we turn to an article by William James which was first pub-

lished in *The American Magazine* for October 1909 (Murphy & Ballou, 1960). James, I may say, was unquestionably the most distinguished individual ever to become President of the SPR (he was President from 1894–1895), although his greatest service to the field, on my reckoning, was to have discovered the incomparable Leonora Piper, whom he liked to call his “one white crow.” She convinced him, beyond any scintilla of doubt, of the reality of psychical phenomena. At all events, in this 1909 article, he recalls an encounter with Henry Sidgwick, the first president of the Society, who died in 1900. I now quote his words:

Like all founders, Sidgwick hoped for a certain promptitude of result; and I heard him say, the year before his death, that if anyone had told him at the outset that after twenty years he would be in the same identical state of doubt and balance that he started with, he would have deemed the prophecy incredible. It appeared impossible that that amount of handling evidence should bring so little finality of decision. (p. 310)

James then proceeds to discuss his own experiences, which, he tells us, have been similar to those of Sidgwick. “For twenty-five years,” he tells us,

I have been in touch with the literature of psychical research, and have had acquaintance with numerous “researchers.” I have also spent a good many hours . . . in witnessing . . . phenomena. Yet I am theoretically no “further” than I was at the beginning; and I confess that at times I have been tempted to believe that the Creator has eternally intended this department of nature to remain *baffling*, to prompt our curiosities and hopes and suspicions all in equal measure, so that although ghosts and clairvoyances, and raps and messages from spirits, are always seeming to exist and can never be fully explained away, they also can never be susceptible of full corroboration. (p. 310)

James was not a pessimist or defeatist by nature, and I think his words reflect what many must have felt at that time although, compared with our own time, there seems to have been no dearth of exciting phenomena to study. The SPR was then embarking on its famous “Cross Correspondence” episode. This was only made

possible by the availability of a whole galaxy of gifted automatists, most of whom were not professional mediums at all but educated, or even academic, women, such as Margaret Verrall and her daughter Helen, the like of whom we have never seen again. But, on second thoughts, James refuses to give way to despair. "It is hard to believe," he says,

that the Creator has really put any big array of phenomena into the world merely to defy and mock our scientific tendencies; so my deeper belief is that we psychical researchers have been too precipitate with our hopes, and that we must expect to mark progress not by quarter-centuries, but by half-centuries or whole centuries. (p. 310)

Let us now jump several decades and consider the case of what I like to call the "Rhine Revolution." In 1933 J.B. Rhine produced a hastily written monograph which he called *Extra-Sensory Perception*, covering his researches of the previous few years. This he then sent to Walter Franklin Prince, head of the Boston SPR and one of his special mentors. Prince, however, could have had no idea what a hot property he was holding for, in 1934, he issued it in a limited edition of a mere 900 copies. The following year, however, Bruce Humphries of Boston, a commercial publisher, took it over, and the book was duly launched onto the general market. I think one can safely say that no other publication in the history of parapsychology or psychical research has ever achieved such acclaim or enjoyed such wide circulation. Science journalists in America wrote enthusiastic articles about Rhine for the national press, and, in departments of psychology up and down the United States, people applied themselves to this novel card-guessing test, which, as it happens, lent itself rather nicely to the fashionable behavioristic approach which American psychology was then everywhere adopting. If ever there was to be a breakthrough for parapsychology, this, surely, would be it. So what happened? What went wrong?

The brief answer is that the phenomena were simply not forthcoming. For Rhine, it was almost an article of faith that ESP was a universal endowment—we all had it to some small degree, and so everywhere it ought to show up as a statistical effect. Moreover, his initial experiences with ordinary student volunteers on the Duke Campus seemed to confirm his assumption. No doubt much

of his early results can now be disregarded as due to the lax conditions of testing that then prevailed, but his monograph lists no less than eight named individuals who were capable of sustaining above-chance guessing under reasonable conditions of testing over a long enough period with astronomical odds against chance. These results cannot easily be set aside. Of the individuals involved the most outstanding was Hubert Pearce, a divinity student at Duke. Nothing, in my estimation, does more to confirm the genuineness of Pearce's performances than the ludicrous scenarios which Mark Hansel was driven to invent in order to discredit him.

Why, then, were there so few Hubert Pearces or even modestly proficient scorers on these other campuses? Why was Rhine himself soon unable to discover another Hubert Pearce? I do not know the answers to my questions, but I doubt if we can much improve on Rhine's own explanation as given in the introduction he wrote for the 1964 edition of *Extra-Sensory Perception*. There he tells us there was, at that time and place, a unique enthusiasm and a team spirit such as was never again to surface either there or elsewhere. If Rhine was right, he may, perhaps, furnish us with one of the clues to the repeated false dawns of parapsychological history to which I have drawn attention. For whatever reason—and we can return to that later—the manifestations of psi are, it seems, situation-dependent to a degree that has few parallels elsewhere in psychology. Indeed, I would go so far as to say that this conclusion may be the most important lesson of all.

The Rhine Revolution had two primary objectives. The first was to demonstrate to the satisfaction of the entire scientific community that the existence of ESP was a fact—for Rhine himself never wavered in his conviction that this was so. The second objective was to make parapsychology academically respectable. This he hoped he had achieved by taking the paranormal out of the murk of the seance room (his unfortunate brush with the medium Margery had left an indelible impression) and into the clear light of the laboratory. Rhine, I may say, worshipped science. For him it took the place of God once he had lost his religious faith as a young man (his mother had hoped he would become a minister). Yet, when Rhine died in February 1980, these two primary objectives were further than ever from fulfillment. On the one hand, the skeptical backlash had gathered momentum, and many eminent scientists were lending their support to a new skeptical

organization, CSICOP, founded in 1976. On the other, popular occultisms and "New Age" fads were clouding the issue for the public at large and making it harder than ever for serious parapsychology to put its message across.

TWO SETBACKS

To add to his tribulations, two major scandals clouded Rhine's last years. The first, right on his doorstep, was the discovery that his protégé, Walter J. Levy, in whom he had reposed so much confidence that he had made him Research Director at his Institute for Parapsychology even before Levy had completed his medical studies, had been guilty of faking his data. This disaster, which could have destroyed the Institute, was all the more tragic inasmuch as Levy himself was, in my opinion, a highly gifted and ingenious experimenter besides being a tireless worker and enthusiast. Unhappily, owing to some weakness of character, he succumbed to the fatal temptation to cut corners and fabricate data when the desired results were not forthcoming. Ironically, his approach, which was based on automated testing of animals—he worked mainly with gerbils—might eventually have led to the kind of repeatable experiment that could have transformed the situation for parapsychology. For animals, after all, are not affected by those situational variables that make the testing of people so precarious. Although Levy forfeited all credibility, it would be unwise, I think, to ignore his own account of why he cheated. He was, he said, the victim of a decline effect; the success he had hoped for on the basis of his earlier work was not forthcoming, and he feared that he would lose the grant he was applying for.

The second scandal, which erupted a few years later (although it did not involve Rhine's entourage), was an even more serious disaster for parapsychology as a whole. I refer, of course, to the case of Samuel G. Soal, the erstwhile Mathematics Lecturer of London University and the leading exponent of experimental parapsychology in Britain. Rhine had little reason to be sorry for Soal, who had long been one of his harshest critics—nothing Rhine ever did could satisfy the perfectionist Soal. On the other hand, Rhine had gone on record as claiming that Soal's investiga-

tion of the card-guessing subject, Basil Shackleton, was one of the mainstays of the case for ESP—a view which I think most of us in parapsychology would then have endorsed. Curiously, there had been murmurings about Soal right from the time the testing of Shackleton was in progress in the early 1940s. One of Soal's collaborators, Gretl Albert, had declared that she had seen Soal altering figures and that Soal had had to silence her with the threat of legal action. It was not until much later, by which time Soal was too senile to speak for himself, that the late George Medhurst drew attention to suspicious-looking patterns in the data from some of the Shackleton sessions; his lead was followed up by Christopher Scott and Philip Haskell. But the final blow came only after Soal's demise when, in 1978, Betty Markwick published in the SPR *Proceedings* an account of her ingenious computer analysis of the data which revealed beyond all doubt that Soal had, indeed, been altering figures in the target sequence so as to produce spurious hits. Her discovery, I may say, was only possible because Soal had been in the habit of reusing his sequence of random numbers.

Perhaps one reason why Soal got away with it for so long is that it seemed incredible to many of us that he had eluded the watchful eye of his co-experimenter, the late and formidable Mollie Goldney. But more profoundly disturbing was how someone of Soal's caliber, who for so long had demonstrated his dedication to the field, could have stooped to such an act of treachery. Subject deception is, of course, something that we have all to learn to live with, however annoying and disruptive it can be. But for a scientist to falsify his or her findings is verily to sin against the Holy Ghost of Science. What possessed Soal to do it one can only speculate. It is known that he had a deviant personality—some would even go so far as to call it a split personality. Whether this goes back to his having been shell-shocked during the First World War, I do not know. I am inclined, however, to agree with Betty Markwick, who points out that Shackleton may well have been genuine when, at the instigation of Whately Carington, Soal re-examined his 1936 data for a displacement effect and thereby discovered his two celebrated subjects, Shackleton and Mrs. Stewart. "Then, as the ESP effect began to decline," says Markwick, "one may imagine that Soal resorted increasingly to boosting the scores." The thought of losing his first high-scorer after all those years of failing to find one may have overcome his normal scruples. If so, then

we could say that here too, as with Levy, it was the ubiquitous decline effect that precipitated the tragedy.

THE PROBLEM OF FRAUD

Delinquent scientists are nothing new in history, and I do not think, in spite of the two highly publicized cases I have just mentioned, that parapsychology has attracted more than its share of such renegades. What is indisputable is that parapsychology is, for obvious reasons, so much more vulnerable than the conventional sciences to the adverse effects of such exposures. The only saving grace was that in both these instances, it was the parapsychologists themselves who exposed the offending practitioner. In the long run, however, what has done most damage to the image of parapsychology has been the confusion created by false claimants, those pseudopsychics who deliberately set out to deceive their investigators and sometimes get away with it. What should be our policy in the face of that danger?

Different conclusions have been drawn by different authorities regarding this particular painful lesson of history. Some parapsychologists, I know, are reluctant to take on board any purportedly gifted subject with a reputation to uphold, preferring to work with anonymous volunteers who make no special demands and insist on no special treatment but can be relied upon to submit meekly to whatever conditions are imposed—even if, at the end of the day, their scoring may be quite undistinguished. My own preference, however, is different. Believing as I do that a talent for psi is a very rare gift, but one well worth cultivating, I think we stand to lose more than we gain by ignoring it just because it is often so awkward to cope with.

No doubt, if one could say with assurance that a given individual is either genuine or a cheat, the situation would be much simpler. But history suggests that some of the most talented performers are what we have learned to call “mixed cases.” We have already heard a good deal about Palladino at this Convention, and some of you may have read Richard Wiseman’s recent article in the *Journal of the SPR* (Wiseman, 1992). But, in fact, nearly all physical mediums, from the Fox sisters onwards, were either detected in fraud or, like Eva Carrière or Margery, gave strong

grounds for suspicion. One consequence of this is that the SPR, egged on by Hodgson and Podmore, decreed that physical mediumship was more bother than it was worth. Promising mediums, like Mrs. Leonard, were henceforth discouraged from becoming involved with it. As a result of this policy, most of the best work with physical mediums this century was done at the Institut Metapsychique in Paris. I have some sympathy with Brian Inglis, who accuses the leaders of the SPR of intellectual cowardice in this regard.

MATERIALIZATION

At the risk of shocking some of the more conservative among you, I would now like to say something on the vexed question of materialization. I think we would all agree that, if there really were such a thing as a full-form materialization, it would differ by another order of magnitude from any other class of paranormal phenomena known to psychical research. Nothing, after all, could be more incredible than the existence of a transient being who, for the duration of a seance, can talk, walk, and display, fully clad, all the functions of a corporeal human being. I would not blame anyone, therefore, for thinking that there is, in fact, no genuine instance of a full-form materialization. No one could deny, however, that there are, to say the least, some puzzling accounts in the literature that suggest otherwise.

A year after the famous Naples sittings, in October 1909, Hereward Carrington published an article in a popular American periodical, *McClure's Magazine*, entitled "Eusapia Palladino, The Despair of Science," and I am indebted to Richard Wiseman for bringing it to my attention. Palladino is not usually thought of primarily as a materializing medium. If she was able to make a small table levitate without using her feet or arms, or could make the curtains or her skirts billow in a closed room, her investigators were well pleased. Such materializations as she did sometimes produce were for the most part of a very degenerate kind, little more than stalks with knobs on. This, however, does not always appear to have been the case. Carrington relates the following curious anecdote about a man called Youriévitsh who was a member of the Institut General Psychologique of Paris, which from

1905 to 1908 had carried out its own extensive, if somewhat inconclusive, series of tests with Eusapia. Some of the luminaries of the French intellectual scene, such as Pierre and Marie Curie and Henri Bergson, had been among the sitters. I now quote what Carrington has to say about this man, Youriévitich:

His father had been dead for some years. At one of Eusapia's séances a solid though unseen body, tangible through the curtain, came to him, calling itself his father. Now his father had a peculiarly deformed finger: it tapered to a point, and the nail was deformed to suit the finger. M. Youriévitich asked his "father" in Russian—a language absolutely unknown to Eusapia—whether his father would impress his hand in the wet clay that was in the cabinet behind the curtain. Some time elapsed, the medium being carefully held and watched meanwhile. Soon the investigators were told to turn up the light and when they had done so and examined the clay in the cabinet, they found upon it the impression of a hand, the first finger of which bore identically the same marks of deformity as that of his long-dead father!

What is one to make of such a story? Is Carrington trying to put a fast one over on us? Would he risk being exposed to the world as a liar should someone pick him up on it? Or had Youriévitich perhaps invented the whole incident to see how much Carrington would swallow? But, in that case, what are we to say about Lombroso, the eminent Italian psychiatrist and criminologist? In a book dealing in part with Palladino, he reports that he witnessed the materialization of his own mother (Lombroso, 1909/1988, pp. 68–69).

He also informs us that Morselli, the director of a psychiatric clinic in Genoa who had carried out what was, I believe, the most comprehensive series of tests on Eusapia ever undertaken, which he then published in two volumes, had likewise encountered *his* mother at a seance, much to his own annoyance, since, according to Lombroso, Morselli was emphatically *not* a spiritualist. Lombroso also tells us that Bozzano once encountered his estranged wife at a seance. During her life, he had carried on a protracted litigation with her, and she was the last person he would have wanted to meet! Yet she spoke to him in a Genoese dialect which Eusapia, a Neapolitan, would not have known. Of course this is

hearsay. We are not obliged to believe such stories, but in all honesty we must then ask ourselves why so many professional men should all have told the same sort of lie for no apparent reason!

I turn now to some much stronger evidence for full form materialization. In 1924 a certain F.W. Pawlowski, an American of Polish extraction who was then Professor of Aeronautical Engineering at the University of Michigan, went on sabbatical to Europe in the course of which he attended a seance in Warsaw given by the medium Franek Kluski. He describes his observations in an article he published in the *Journal* of the American SPR for September 1925. "Franek Kluski," we now know (see Weaver, 1992), was the pseudonym of Teofil Modrzejewski, a banker who was also a writer, a journalist, and a poet of some distinction. It was almost by accident, after attending a sitting with the medium Jan Guzik, that he discovered that, like his father, he had mediumistic gifts. He never used these gifts for mercenary ends even though he was, possibly, the most remarkable materializing medium of all time. One of the extraordinary features of his seances was the sheer number of assorted phantoms that simultaneously invaded the seance chamber, each performing different antics and often speaking different languages. Occasionally, the odd phantom bird or animal would also put in an appearance. Of course, all this took place in very subdued light, but many of the phantoms are described as being self-luminous. Still more bizarre, they often appeared first as less than life size, reaching normal adult size only gradually as the seance progressed and as the medium gained in strength.

Could Pawlowski have hallucinated the whole affair? It is, indeed, tempting to clutch at any straw. In fact, however, this is ruled out as a possible explanation because of the use of the following ingenious stratagem. It was customary at Kluski seances to ask the phantoms to dip their hands into liquid paraffin wax. As the wax cooled it would form itself into a glove—no more than about one millimeter thick. A human being cannot divest himself or herself of such a glove without shredding it, but a phantom, that can dematerialize, leaves an empty and unspoilt cast when it does so. This is what Kluski's phantoms obligingly did. Afterwards, plaster of paris can be poured into the empty glove and a plaster cast obtained showing the minute texture and skin markings of a human hand. Just to make sure that no substitute gloves could

have been introduced at any stage, at some of these seances (notably those conducted by Geley in Paris) certain chemicals, such as cholestrin, were added to the paraffin wax without the knowledge of the medium or the sitters.

Fortunately some of these plaster casts have been preserved. Most of these are in Paris at the Institut, but I have seen some specimens at the SPR in London, and there are many illustrations in Geley's book (Geley, 1927/1975). Some of the Kluski casts are very complex, showing the two hands clasped together. Another curious feature of some specimens is that, though they have the proportions of an adult hand, they are the size of a child's hand. This nicely tallies with Pawlowski's observation that the phantoms only grew to normal size in the course of the seance. There is a passage towards the end of Pawlowski's article that is unbearably poignant in the light of all that has since transpired. For there he declares:

I am perfectly convinced that we are on the threshold of a new science and probably of a new era. It is impossible for anyone to reject or to deny these phenomena, and it is impossible to explain them by clever trickery. I realize perfectly that it is difficult for anyone to accept them. (p. 503)

And a little later he adds:

To accept them would mean to change entirely our attitude toward life and death, to be obliged to revise entirely our sciences and our philosophy. (p. 503)

We now know only too well what actually transpired. Kluski gave his last seance in 1926, after only seven years of mediumistic activity, and died in 1942 at the age of seventy. Nothing remotely like this was ever to be seen again. Today we pin our hopes, not on exceptional individuals like Kluski, but on the ingenuity and methodological excellence of our leading experimenters who, despite lack of funding, contrive to make steady, if unspectacular, progress. Yet I do not think I would be belittling current initiatives if I were to say that no one approach, however ingenious, is likely to go on paying dividends indefinitely. For if there is one lesson that our history should have taught us, it is that innovation is the name of the game and that routine is fatal to success.

CONCLUSION

If we adopt the skeptical interpretation and treat parapsychological history as nothing more than a succession of deceptions and blunders, then the decline of the phenomena can be easily explained. Every time serious investigators come to grips with some particular set of paranormal claims these become discredited, and the excitement dies down until a new set of impostors with a new repertoire of tricks comes to the fore and the cycle repeats itself.

The weakness of the skeptical interpretation is its failure to offer any specific, plausible, normal counter-explanation to the various episodes that go to make up our history. Until it does so, we must consider other possibilities, however far-fetched, for this "attenuation effect" in our history to which I have drawn your attention. I would like, therefore, to end by proposing one such idea.

Paranormal phenomena, we could say, represent a violation of the natural order. Now, nature reacts to such outrages much in the same sort of way that our bodies react to an infection. Hence, even if we can succeed in outwitting nature for a time, it will eventually get even with us, and we then have to start all over again on a new tack. If all this sounds too anthropomorphic for you, I must apologize; but allow me to develop my theme. Let us assume that the grosser this violation or infection, the more strenuously nature will strive to reassert the status quo.

Two implications can be derived from this model. First, we would predict that every new phenomenon or new approach in parapsychology is likely to flourish at first before nature has had a chance to rally her defenses. It will then gradually dissipate itself leaving in its wake doubt, confusion, and misgivings. For example, if crop circles are indeed paranormal (and I hazard no guess), we may surmise that, having reached a peak in number and complexity, they will then diminish in frequency and quality with each successive season until all that remains is the legend and a photographic record.

Secondly, however, we may suppose that the weaker the phenomenon in question, the smaller the departure from the norm which it represents, the longer it will endure. From our analogy with immunology we know that alien organisms, bacilli or whatever, can survive indefinitely in the tissues of a healthy body, provided only that they are sparse enough to cheat the immune sys-

tem and pose no threat to the host. Hence we may predict a much longer life for the psi phenomena of the laboratory—although even there novelty should be at a premium.

Intuitively, one could try to order the variety of paranormal phenomena into a hierarchy according to the degree to which they upset the status quo. Thus, full-form materializations would mark the top end of the scale while micro-PK of the RNG variety would come at the bottom end. Good qualitative free-response ESP would occupy a position somewhere between these two extremes. The crucial point I want to make is that, no matter what the particular phenomenon we are dealing with, it is futile to hope that we could ever arrive at the perfect formula which, if adhered to faithfully, would guarantee a positive outcome. Repeatability in our field can never be absolute. Instead we shall have to recognize that we are caught in a battle of wits against the conservative forces of nature and that success will always depend on our being able to remain at least one step ahead.

These, at any rate, are the lessons I have drawn from my reading of our history. I can but pass them on to you for what they may be worth.

REFERENCES

- Carrington, H. (1909). Eusapia Palladino: The despair of science. *McClure's Magazine*, 33, 660–675.
- Gardner, M. (1989). *How Not to Test a Psychic*. Buffalo, NY: Prometheus.
- Geley, G. (1927/1975). *Clairvoyance and Materialisation*. New York: Arno. (Reprint of English edition, London: Unwin, 1927, translated from French edition of 1924).
- Kappers, J., Akkerman, A.E., van der Sijde, P.C., & Bierman, D.J. (1990). Resuming Work with Pavel Stepanek. *Journal of the Society for Psychical Research*, 56, 138–147.
- Lombroso, C. (1988). *After Death—What?* Wellingborough, Northamptonshire: Aquarian Press. (Original work published 1909).
- Markwick, B. (1978). The Soal-Goldney experiments with Basil Shackleton: New evidence of data manipulation. *Proceedings of the Society for Psychical Research*, 56, 250–277.

- Markwick, B. (1985). The Establishment of Data Manipulation in the Soal-Shackleton Experiments. In P. Kurtz, (Ed.), *A Skeptic's Handbook of Parapsychology* (pp. 287-311). Buffalo, NY: Prometheus.
- May, E.C., Humphrey, B.S., & Hubbard, G.S. (1980). *Electronic Systems Perturbation Techniques* (final report). Menlo Park, CA: SRI International.
- Murphy, G., & Ballou, R.O. (1960). *William James on Psychical Research*. New York: Viking.
- Pawlowski, F.W. (1925). The mediumship of Franek Kluski of Warsaw. *Journal of the American Society for Psychical Research*, 19, 481-504.
- Radin, D.I., & Ferrari, D.C. (1991). Effects of Consciousness on the Fall of Dice: A Meta-analysis. *Journal of Scientific Exploration*, 5, 61-63.
- Stevenson, I. (1990). Thoughts on the Decline of Major Paranormal Phenomena [SPR Presidential Address 1989]. *Proceedings of the Society for Psychical Research*, 57, 149-162.
- Weaver, Z. (1992). The Enigma of Franek Kluski. *Journal of the Society for Psychical Research*, 58, 289-301.
- Wiseman, R. (1992). The Feilding Report: A Reconsideration. *Journal of the Society for Psychical Research*, 58, 129-152.